POPULATION TODAY

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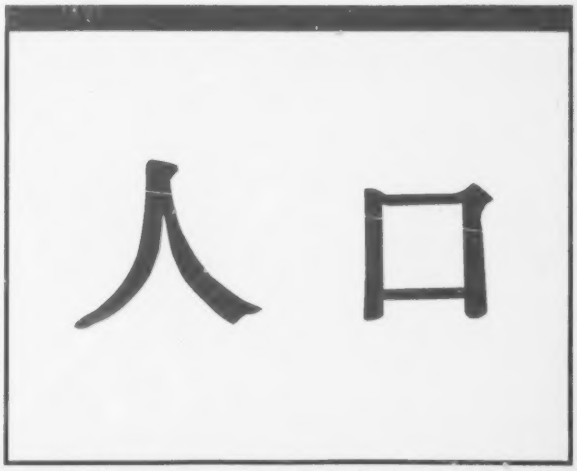

Chinese character "ren kou," captures the essence of the term "population": a stick figure (person) plus a hollow square (mouth)—or people needing to be fed. (See page 3.)

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FROM THE EDITOR'S DESK

Now that the information age has dawned, marketers have to worry about how to sell the stuff. Copywriters are cautioned to "sell the sizzle, not the steak." But where is the sizzle of the demographic t-bone?

Some information marketers have found their slant. They are ascribing to demographic data a sheer brute strength and superhero-like power that men, women, and even wet-behind-the ears students need to compete in the information age. For example:

"*Infuse* your business marketing proposals with population trend forecasts to the year 2000. *Unleash* precise crime, ethnic and age distribution statistics on all your business proposals or school reports... Imagine quickly seeing population trends, real estate growth, and age distribution breakdowns... And, *imagine having the same kind of awesome demographic power* as big Fortune 500 company research departments. [From an 8-page, glossy, full-color promo for Almanac USA, DAK Industries, italics added.]

Is your pulse elevated yet?

And, if the crush of hard data gets a bit overwhelming at times, there is relief for those with math anxiety. A newsletter that features demographic and marketing information on Europe hypes old-fashioned insight, offering:

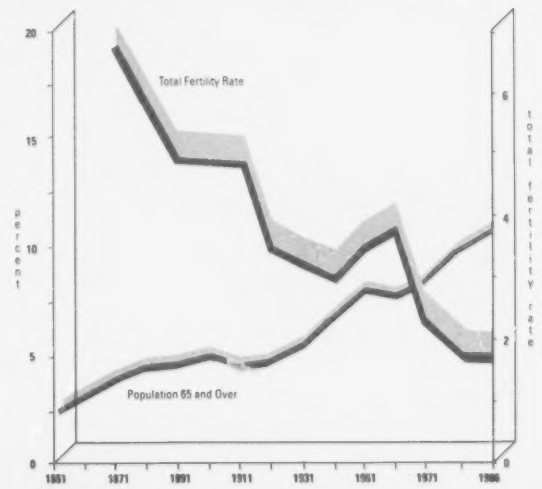
"Trends and implications to help you fight your way through the research and data jungles."

Yep. Hype-wise, it's a jungle out there.

–Susan Kalish

SPEAKING GRAPHICALLY

Long-term Decline in Fertility Rates Cause Populations to Age: Canada, 1851-1986



The Canadian population is aging, but not just because the post-World War II baby boomers are growing older. Indeed, the crest of that wave, those born in 1959, will not reach age 65 until the year 2026. This aging is rather a long-term trend caused by the long-term historical decline in fertility. The baby boom has merely delayed the onset of the full effect of this decline.

Source. Charting Canada's Future: A Report of the Demographic Review, Ministry of National Health and Welfare, Ottawa, Canada, see page 8.

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World's Largest Head Count Ever

1,133,682,501. That's the tally in the largest census ever taken. China has recently reported the results of its July 1990 enumeration, and the total figure is somewhat higher than previous estimates. A second, higher figure is given for the mainland plus Taiwan, Quemoy, and Matsu (20,204,810) and Hong Kong and Macao (6,130,000): 1,160,017,381.

China's population consists primarily of the Han nationality. The Han numbered 1,042,482,187, 92 percent of the total, up 10.8 percent from the 1982 Census. Although minority groups account for only 8 percent of the country, their total of 91,200,314 would make them the 11th largest country in the world, just behind Pakistan and ahead of Mexico! China's 55 ethnic minority groups are mostly concentrated in less populated areas of the country, some of them border areas like Inner Mongolia to the north, Xinjiang and Tibet to the west, and Yunnan to the south.

Involvement of the minorities in China's aggressive family planning program has been more gradual than the Han majority, but their much larger increase of 35.6 percent since 1982 may change that. Some of the increase in the minorities is probably due to a more receptive climate to report oneself as a minority member, according to Judith Bannister of the Census Bureau. The implied growth rate of 3.4 percent for minorities from 1982 to 1990 is too high to have resulted simply from natural increase (births minus deaths). In China, simple self-identification in an ethnic group is not enough; some form of proof of ancestry is required.

In the 12 months before the census, there were 23.5 million births in China and 7.0 million deaths. This results in a crude birth rate of 21.0 per 1,000 population and a crude death rate of 6.3. The official annual growth rate, at just under 1.5 percent, is higher than hoped for under China's avowed plan not to exceed a population of 1.2 billion in 2000. But, even though that goal will likely not be realized, consider what China's population might be if the growth rate had not declined.

Jill Merrick

Included in the head count.

In the late 1960s, China was growing at about 2.6 percent per year and Chinese women averaged about six children each during their lifetimes. If that situation had remained unchanged, China's 1990 Census would have been 1.4 billion, not 1.1 and the prognosis for 2000 would be 1.8 billion. Thus, China's census is a landmark event in several ways: for the largest-ever head count and for the head count that might have been.

The largest of China's 27 provinces and autonomous regions is Sichuan, with a population of 107,218,173. Henan, with 85,509,535, and Shandong, with 84,392,827 are in second and third place, respectively. The autonomous region of Tibet has the smallest number, with 2,196,010.

The percentage of the population classified as "urban" in China's latest census is 26.2 percent, settling an issue that had given statisticians fits for many years. During the 1980s, the official figure for the percent urban in China rose very rapidly, primarily due to the reclassification of population for administrative reasons. The percent urban in the 1982 census was 20.6 percent, but it proceeded to rise rapidly after 1982, even passing the 50 percent mark. Although the definition used in the 1990 census is not exactly like that of 1982, it is considerably closer and gives a more reasonable picture of urbanization. The 1990 definition of urban classifies village-level communes as rural, where post-1982 figures probably included them as urban in many cases.

Other new data released show Beijing's population at 10,819,401 plus 3,456,982 in adjacent areas. Shanghai, China's largest city, now stands at 13,341,896 with 5,127,460 in its nearby counties.

Based on a postcensus check, the overall quality of the job done by the 7 million enumerators was deemed to be quite high. State Statistics Bureau director Zhang Sai said that the measured net error rate was 0.6 per 1,000 people, a very low "undercount." This estimate is based on reinterviews with a sample of 173,409 persons in accordance with the Rules Governing the Sampling of the Census Findings. The figures released thus far are based on an early hand tabulation of the results with much more detail coming after the census has been fully processed by computer. There is also some good news for non-Chinese analysts in that plans call for dual Chinese-English text in the 1990 census publications.

Much of the demographic value of China's census awaits the release of the country's age distribution, probably by spring 1991. China now has two modern censuses with openly published data. This gives demographers a real opportunity to analyze shifts in fertility and mortality over the years and to check the accuracy of reporting. When it comes to population data, two censuses newly available from a country as large as China is the demographer's version of what astronomers had hoped for from the Hubble space telescope.

–C.H.

From Abortion to Contraception: Tbilisi, 1990

Under the theme "From Abortion to Contraception: Public Health Approaches to Reducing Unwanted Pregnancy and Abortion through Improved Family Planning Services," 220 experts and participants from 27 mostly European countries and international organizations shared experiences this October in Tbilisi, Georgia, USSR. The meeting centered on how to facilitate access to modern contraceptives so that women have choices other than abortion to regulate their fertility.

The United Nations Population Fund (UNFPA) convened the meeting in association with the World Health Organization European Regional Office (WHO/EURO), the International Planned Parenthood Federation/Europe, and the Zhordania Institute of Human Reproduction, Tbilisi.

In her keynote address, Dr. Nafis Sadik, executive director of UNFPA, called reproductive freedom "the freedom from which all others flow." While abortion is not considered a method of family planning, UNFPA joined with WHO and the other sponsors in recognizing that unwanted pregnancy and unsafe abortion constitute major public health and social issues. The Tbilisi theme, predicted Dr. Halfdan Mahler, secretary general of the International Planned Parenthood Federation worldwide, "would dominate the 1990s." Dr. Jo Asvall, regional director of WHO/EURO, spoke of "desperate women, troubled health professionals, and scared politicians."

Nowhere was the abortion problem more apparent than in the Soviet Union. Dr. Archil Khomassuridze, director of the Zhordania Institute (the WHO Collaborating Center in Human Reproduction in the USSR), confirmed that his country has Europe's highest abortion rate and one of the lowest contraceptive prevalence rates. Vast regional differences exist. More than 6 million legal abortions were officially recorded in 1988 in the Soviet Union, and another 6 million may have been performed illegally. Under *glasnost,* data that were previously held confidential have become public, and *perestroika* is facilitating improved access to modern contraceptives for the more than 70 million women of reproductive age.

Another report described the dramatic decline in maternal mortality in Romania following re-legalization of abortion, from 162 per 100,000 live births in 1988 to about 50 in the first half of 1990. Dr. Etienne Baulieu of the *Université de Paris-Sud* reported that more than 60,000 French women have now used a combination of RU 486 and prostaglandin without a single fatality and few side effects. The usefulness of simple, safe, and inexpensive menstrual regulation (MR) procedures was also noted by several speakers. Neither RU486 nor MR is yet readily available for early pregnancy termination. Much suffering and unnecessary death could be avoided if they were.

Sovfoto

Moscow mother: Will she have options other than abortion to limit family size?

Tbilisi Declaration

Of major international importance was the Tbilisi Declaration, approved by participants at the closing plenary session. It affirms the basic human right to decide freely, responsibly, and without coercion on the number and spacing of children; the right to reproductive health, choice, and dignity, particularly women's right to self-determination in their sexual and reproductive lives; and the right of every child to be a wanted child.

The declaration further recognizes unwanted pregnancy and unsafe abortion as major public health and social problems. It notes that criminalization of abortion has little impact on incidence while greatly increasing women's resort to unsafe abortion with its associated threats to health and well-being. The declaration cautions that even with the best family planning programs there will always be a need for safe abortion.

—Henry P. David

Henry P. David is Director of the Transnational Family Research Institute in Bethesda, Maryland.

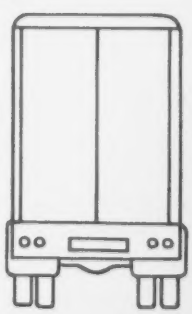
The rapporteur's report of the Tbilisi meeting will be published as a supplement to *Entre Nous,* available without cost from SFP/WHO European Regional Office, Scherfigsvej 8, DK-2100 Copenhagen, Denmark.

PRB Has Moved

The books are back on the shelves, the PCs are plugged in, and at least some of the pictures and maps have found their places on new walls. The Population Reference Bureau has completed its move to new offices. The address for PRB and Decision Demographics is as follows:

1875 Connecticut Avenue, N.W., Suite 520,
Washington, D.C. 20009-5728.

The new phone numbers are 202-483-1100 for PRB and 202-462-9400 for Decision Demographics. The fax number for both offices is 202-328-3937.



Ethiopia: Fertility Up in Early 1980s

Fertility in Ethiopia rose in the early 1980s, according to a recent study by Habtemariam Tesfaghiorghis of the Australian National University.

The study was based on the 1980-1981 Ethiopian Demographic Survey and the 1964-1967 and 1968-1971 National Sample Surveys (conducted by the Central Statistical Office of Ethiopia).

Like many other eastern and central African countries, demographic data from Ethiopia, especially on fertility levels, has been limited and unreliable. Neither the 1970s World Fertility Surveys nor the 1980s Demographic and Health Surveys included Ethiopia. The Ethiopian 1984 Population Census provided some fertility analysis, but only in detail for the capital, Addis Ababa.

Data Defects

There are some evident defects in the survey data, the author reports. For example, a few younger women (age 15-19) were recorded as having more than 10 children, while some older women reported 30 children and more.

The author attributed these unacceptable numbers to errors in coding procedure: for example, if a single digit is placed in the 10s column, four children (properly coded as "04") becomes "40" children. Further, in the Ethiopian cultural context, women sometimes consider their grandchildren as their children and report them that way. Also, women frequently omit children who have died. The author used indirect methods (Brass and Arriaga) to estimate levels of fertility, and found that, despite these difficulties, the quality of the survey data was fairly good.

Many northern and southern African countries followed a pattern of low fertility in the 1940s, followed by high fertility in the 1960s, and then fertility declines in the 1980s. In Ethiopia, however, this transition lagged: relatively low levels of fertility into the 1960s were followed by a dramatic rise in the early 1980s.

Continued on page 10

SURVEY REPORT

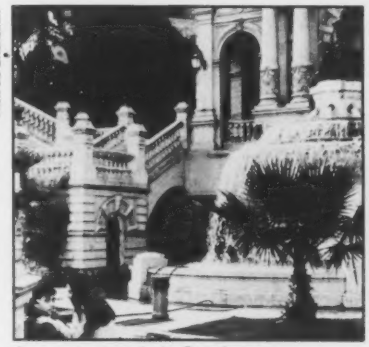
Chile

In 1988 a team of researchers from the Department of Public Health at the University of Chile interviewed some 1,600 young adults in the Santiago metropolitan area on all aspects of their sexual experience and reproductive behavior. The results of that survey were recently released in a report entitled *Survey of Reproductive Health among Young Adults.*

In the mid-1980s, when planning for the survey began, there was great concern for the apparently stalled fertility decline among the population aged 15-19. Age-specific rates for all other groups had declined by as much as 24 to 29 percent in the previous decades, but births among teens remained around 65 per 1,000, having declined only 7 percent since 1969.

The 1988 survey shows that declines in teen fertility continue to be slow: the national age-specific rate is now about 59 births per 1,000, although in Santiago the rate is closer to 35 per 1,000. Still, the national rate is not much higher than that of the United States (53 per 1,000 in 1980), and it is significantly lower than the rates in most other Latin American countries (94 in neighboring Bolivia, 139 in Guatemala, and 84 in Mexico).

Sixty-two percent of births to adolescents were conceived outside of marriage, but the majority of young mothers get married while still pregnant, so only 21 percent are still single at the time of birth. Surprisingly, roughly half of premaritally conceived babies were planned, indicating that it is relatively common for pregnancies to "seal" a marriage.



Alex de Sherbinin

A young couple in Santiago.

Of adolescents who received some formal sex education, 52 percent of the females and 36 percent of the males were taught by a family member—most often the mother. Only 5 percent of males and females were taught by a teacher or health professional, and less than 1 percent by a priest or within the church.

Premarital sex is fairly common. By age 23, 66 percent of females and 90 percent of males declared that they had engaged in premarital sex.

Though only a fourth of teens with some formal sex education actually used contraceptives during their first sexual encounter, this rate was twice that of those without sex education. Of unmarried adolescents who had had sex within four weeks prior to the survey, over 60 percent had used some form of contraceptive. The pill was the most popular method, followed by the rhythm method, the IUD, and condoms.

Most of the surveyed teens showed some understanding of how AIDS is contracted, and 80 percent knew that one could have the AIDS virus without showing any symptoms. However, just 65 percent of respondents recognized that use of condoms could reduce the risk of infection.

—A. de S.

DEMOGRAPHER'S PAGE

The New Census of China

by H. Yuan Tien

The initial figures released on the Fourth National Census of the People's Republic of China report on a myriad of demographic facts (see Table 1). Although subject to later computer verification, these figures tell us much about the effectiveness of China's current population policies, priorities for the future, and the accuracy of past estimates.

China's policymakers, population-planning officials, and demographers are primarily concerned about three population-related issues:

1) population size, growth, and control;
2) education and illiteracy; and
3) surging urbanization.

These issues are of central importance in China's plans to develop and modernize the country.

It is no accident, therefore, that the initial census release included this particular batch of figures. Behind the sex ratio and the proportion of minority nationalities in the total population, for instance, lie the two leading questions in China's population planning policies of recent years: 1) has the implementation of such measures as the "one child per couple" led to female infanticide and hence distorted the sex ratio? and 2) should the country's 56 minority nationalities continue to be exempt from the nation's comprehensive measures for curbing fertility?

The census apparently answers both questions in the negative. There is no evidence that population planning measures have had a negative impact on the sex ratio (106.6 males per 100 females in 1990, versus 106.3 in 1982). Figures showing that the rate of growth for minority nationalities has been 3.5 times greater than for the Han majority may pave the way for China's including minorities in its population planning efforts.[1]

Table 1. Principal Population Figures of China 1990 and 1982 Censuses

	1990	1982
Total population	1,133,682,501	1,008,175,288
Sex ratio (M/100 F)	106.6	106.3
Persons per household	3.96	4.41
Nationalities		
Han	1,042,482,187	940,880,121
Minorities	91,200,314	67,295,167
Educational attainment (per 100,000 population)		
University	1,422	615
Middle school	8,039	6,779
Jr. middle school	23,344	17,892
Elementary	37,057	35,237
Illiteracy and semi-illiteracy		
Age 15 and older	180,030,060	229,964,474
% of total population	15.9	22.8
Urban population	296,512,111	206,588,582
% of total population	26.2	20.6

Source. China's Fourth National Census, Release No. 1, 1990.

The figures on educational attainment and illiteracy are indicators of the extent of development and modernization to date, as well as of skill levels essential to future modernization. China has come a long way, but the road ahead is long.

China's demographic measures stabilized during the 1980s in an unexpected and perplexing way. The 1980s saw sharp shifts in policy (the "one child" campaign), yet, both the crude death and birth rates have remained stable, hovering about 8 and 21-22 per thousand, respectively, throughout the period. The annual rate of natural increase has remained about 1.5-1.6 percent, and the total fertility rate has been steady at around 2.5 for the country as a whole.

The relative stability in those vital rates suggest that China's demographic transition has completed its first phase. No major reductions in fertility are likely to occur without additional progress in development and modernization. Under the present socioeconomic conditions, in other words, the national effort to slow population growth evidently has reached its limits.[2]

Additional population growth is certain to occur, because the large cohorts of men and women born during the 1960s have reached their reproductive years. Amid this continuing but "stable" growth, the redistribution of China's population will receive more attention in the coming decade.

Urbanization

Urbanization is a sometimes overlooked measure of development and modernization. Urbanization in China started to rise following the de-collectivization of agriculture and economic deregulation in the late 1970s. Its pace will accelerate in the 1990s. As the new census shows, in only eight years, no fewer than 90 million more people became urban residents. Despite the problems of urban definition discussed in the accompanying article (page 3), urbanization looms as the central issue in China's demographic transition. Population gains in China's two biggest cities demonstrate this. Beijing's population jumped 17.2 percent, and Shanghai's 12.5 percent between 1982 and 1990. During the same period, the rate of natural increase was 7.9 per 1,000 in Beijing and 5.0 per 1,000 in Shanghai. The just-released urban figures underscore a rising concern among Chinese policymakers about the many uncertainties involved in the surging cityward migration from the countryside.

The returns of the Fourth National Census, once they ultimately withstand tests of accuracy, should serve to erase several uncertainties about China's immediate past. The few figures released

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at the Ohio State University

to date, in fact, make it necessary to adjust almost all population and vital statistics that have appeared in various official yearbooks since 1982.

The officially authorized statistics in the first three columns of Table 2 show some internal inconsistency: if one applies the reported vital rates (columns 2 and 3) to the year end population totals (column 1), the estimated population totals (column 4) do not match the reported totals. The differences are irregular in direction. In light of the 1990 Census, the year-end population totals during the intercensal period clearly understated China's population size. At the end of 1989, for instance, the official population total was 1.112 billion, and the total estimated from the vital rates given for the year should yield a total population of 1.128 billion at the end of 1990. The 1990 census total of 1.134 billion as of July 1 exceeds both by large margins. The overall increase in population during the eight years between the two censuses was 12.5 percent, or an average annual rate of about 1.6 percent.

It is difficult to account for the difference of more than 21.7 million within six months between the end of 1989 and the July 1 census, unless the intercensal population totals were based on flawed vital statistics. The number of births reported by local population planning personnel (see column 5) shows the probability of this interpretation. Under-reporting of births in official statistics is clearly prevalent. Even though the National Family Planning Commission has given much higher numbers for some of the recent years, the figures of 22-23 million births a year for 1987-1989 may still understate, at least somewhat, fertility rates.[3]

At this level of reproduction, and in view of the almost constant crude death rate of 6.6 per year, the total estimated population at the end of 1990 would still have been lower than the census total of 1.134 billion six months earlier. Data published between 1982 and 1990, therefore, require extensive adjustment to render them consistent with one another. This revision must await the release of age-specific census data.

Policy Directions

What is likely to be the country's population at the century's end? For nearly a decade, the aim of China's population planning effort has been to hold the population size to first, "within" and then "around," 1.2 billion in the year 2000. Even before the census, China's fertility created doubt about whether this goal was actually attainable and caused debate about the seemingly innocuous shift to the new language of "around" 1.2 billion. Unless sharply different events transpire, the census returns reinforce the view that, at the now-prevailing yearly growth rate of 1.6 percent, China is highly likely to see a population of close to 1.35 billion in the year 2000.[4] The number of couples entering the reproductive age, as noted earlier, will peak between now and 1995 on account of the high fertility of the mid-1960s. This larger-than-hoped-for population total can be expected even if China's population planning effort continues to be as effective in the 1990s.

The new census figures may be used to buttress the position of those in China who since 1984 have resisted the shift away from the stringent "one child" policy, and have blamed the rise in fertility on the "opening small holes" policy (that is, allowing an increasingly larger proportion of couples to have a second child after an appropriate interval).[5] This hard-line position, however, overlooks the fact of the steady birth rate around the low 20s since both before and after the one child campaign in 1979-1980 and the distinct possibility of flaws in the data in the 1983-1985 period.

In short, China's population planning effort was about as effective as it could have been. Further reductions in fertility, although eagerly urged by some, must realistically await wider and deeper economic development and modernization. The large and still growing population of China notwithstanding, the economic reform and deregulation of the 1980s have wrought considerable improvement in standards of living. There is good reason to believe that these initatives can contribute more to China's future demographic well-being than can population con-

Continued on page 8

Table 2. China's Population and Vital Statistics, 1982-1990

Year	(1) Reported population (year end)	(2) Crude birth rate	(3) Crude death rate	(4) Estimated population (year end)	(5) Reported births*
1982**	1,008,175,288	20.9	6.4		
1982	1,015,900,000	21.1	6.6		
1983	1,027,640,000	18.6	7.1	1,030,630,550	14,727,209
1984	1,038,760,000	17.5	6.7	1,039,457,860	13,681,347
1985	1,050,440,000	17.8	6.6	1,049,978,608	13,882,174
1986	1,065,290,000	20.8	6.7	1,062,204,928	15,981,719
1987	1,080,730,000	21.4	6.6	1,080,310,589	16,549,825
1988	1,096,140,000	22.4	6.6	1,096,724,804	n.a.
1989	1,111,910,000	20.8	6.5	1,113,459,012	16,710,702
1990**	1,133,682,501	21.0	6.1		n.a.
1990	n.a.			1,127,810,313	n.a.

* From summary statistics of the National Family Planning Commission's internal annual report. These seem to have grossly understated the level of fertility. For 1987-1989, the National Family Planning Commission gave a much higher number of births than those for the other years. They were 22.58, 22.62, and 22.93 million, respectively (see China Population Newsletter, 1990, No. 4, p. 8).

**Census figure.

Canada Charts Its Demographic Future

Through a major three-year demographic research program, Canadians have projected the crest and—equally important—the ebbing of the population wave, as it will pass through that country during the next century.

In some ways, Canada's demographic profile resembles that of other developed countries, especially the United States. Canada has its post-World War II baby boom, a graying of its population, and an important stake in immigration.

Canada's population will peak in 2026 at 31 million according to *Charting Canada's Future*, a publication of the Demographic Review project, spearheaded by Ottawa's Ministry of National Health and Welfare. By the year 2086, however, the population will fall back to the country's 1986 level of 25 million. Canada's population will eventually stabilize at its 1960s level of 18 million.

The demographic review project was launched in response to Canadians' widespread concern about low fertility, an aging population, and perceived rapidly rising immigration, explained mathematical demographer and project leader Mike Murphy in a talk in Washington, D.C., this fall.

The national fertility rate has held steady at 1.7 lifetime births per woman for the past decade, he reported, with no rise evident except in Quebec. Quebec's low rate of 1.4 has recently risen to something over 1.5—apparently in response to further family tax breaks and allowances, recently instituted by this province's government. Even so, Quebec's share of the national population is projected to decline slightly from 26 percent in 1986 to 24.5 percent in 2011.

With no immigration and continuation of the 1.7 below-replacement fertility rate, the report shows that Canada's population would peak at 28 million in 2011, decline to 19 million in 2096, and mathematically disappear—in 800 years.

The assumption of annual net immigration of 80,000 in the report's standard projections is based on the average total immigration of 130,000 a year and estimated emigration of 50,000 a year during 1970-1986. However, targeted immigration rose to 160,000 in 1989. With much immigration offset by emigration out of Canada, the foreign-born share of the population, which has stayed around 15 percent for the past half-century, is projected to rise to 32 percent in 2026 if fertility remains at 1.7 births per woman.

Immigration during the past four decades primarily affected specific urban areas, the report says. Most immigrants have headed for Toronto, Montreal, or Vancouver. The top 10 source countries for 1986 were, in descending order, the United States, India, Vietnam, Hong Kong, Poland, the United Kingdom, Jamaica, the Philippines, Guyana, and El Salvador. Three decades earlier, the list included only European nations and the United States.

Persons aged 65 and older currently make up 11 percent of Canada's population, a share that will rise to between 20 and 25 percent in 2026 and then level off, if fertility rates remain at 1.7. This aging of the population is slower than in the United States and other Western countries, the report observes, but is inevitable in a low-mortality, low-fertility country.

"Contrary to popular belief, Canada is not facing a population crisis," explained Perrin Beatty, minister of national health and welfare, in a bulletin on the project. He characterized this as the project's "most important finding."

—J. v.d.T.

Copies of *Charting Canada's Future,* written in English and French, with 40 pages of graphics, are available free of charge from Demographic Review Secretariat, Brooke Claxton Building, Room 1654, Tunney's Pasture, Ottawa, Ontario, Canada K1A OK9.

Embassy of Canada

Celebrating in Manitoba: Canada encourages a moderate, controlled increase in immigration.

China's Census

Continued from previous page

trol as such. China should not take population planning as an end to be pursued without regard to social and other costs at the couple's level. Instead, China needs to stay its current, less stringent course.

References

1. See statement of Madame Pen Peiyun, Minister of the National Family Planning Commission, in *China Population,* July 27, 1990.
2. H. Yuan Tien, *China's Strategic Demographic Initiative,* New York: Praeger, 1991 (forthcoming).
3. China Population Newsletter, Vol. 7, No. 4 (1990), China Population Information and Research Center, p. 8.
4. H. Yuan Tien, "China: Demographic Billionaire," *Population Bulletin,* Vol. 37, No. 2 (1983).
5. For a summary of the policy dispute, see H. Yuan Tien, "China's Population Planning After Tiananmen," *Population Today,* Vol. 18, No. 9 (1990), p. 6

A wall chart of 1990 census data shows major demographic indicators for China and its provinces, autonomous regions, and metropolitan areas. To order the China Census Data Sheet contact: Director, China Population Information and Research Center, P.O. Box 2444, 12 Da Hui Si Street, Beijing 100081, China. Cost: $3:00 each.

NOTE: This article was written while serving as an advisor to the China Population Information and Research Center. I am grateful for the help extended me by its director, Mr. Xiao Zhili, and others at the center. Of course, I, alone, am responsible for its contents.

Alfred Sauvy (1898-1990)

Alfred Sauvy, pioneering French demographer, died recently at the age of 92.

Sauvy founded the National Institute of Demographic Studies in Paris in 1945 and directed it until 1962. He served as editor of *Population,* the organization's quarterly journal, until 1975. Sauvy established the Demography Institute at the University of Paris for postgraduate training in demography and taught social demography at the College de France.

Sauvy served as delegate to the U.N. Population Commission for three decades and was president of the International Union for the Scientific Study of Population in the early 1960s.

He was a prolific author, making contributions in a wide range of economics, statistics, and population areas. His work focused on low fertility countries and efforts to raise the birth rate in France.

PROFAMILIA Turns 25

PROFAMILIA—the Colombian family welfare organization—helped one of the highest-fertility countries in Latin America cut its population growth rate in half. When Dr. Fernando Tamayo founded the private, nonprofit organization in 1965, a Colombian woman could expect to have nearly seven children during her childbearing years. Today, women average fewer than three.

A great increase in the use of family planning accounts for much of the decline. More than half of Colombian women currently use modern methods of contraception, and the majority of these obtain them through PROFAMILIA, which operates a network of 48 clinics in both urban and rural areas.

An illustrated booklet, "Building an Effective Family Planning Program: The Story of PROFAMILIA," written by PROFAMILIA personnel and originally produced in Spanish by PRB's IMPACT Project, is now available in English from PRB, free of charge. For the Spanish version, contact: PROFAMILIA, Calle 34 No. 14-52, Bogota, Colombia, 57-287-21-00.

SOFTWARE

PEDICT, a recently developed English-Chinese and Chinese-English electronic dictionary, is now available from the Peking University Press. It includes 25,000 English terms and their Chinese equivalents in demography, family planning, sociology, economics, public health, and related areas. It allows the user to search for terms in either direction and works with partial entry of terms. It is user-friendly, and offers a main menu in both English and Chinese.

The software (ISBN 7-301-00131-2/C.24) is designed for the IBM PC and compatibles with hard disks with 3 Mb free space. It works with DOS 2.1 or above. PEDICT is available on either 5.25 ($119.95) or 3.5 inch disk ($149.95). It may be purchased directly from the Peking University Press, Beijing 100871, China, or from Fanghui David Feng, China Population Information and Research Center, P.O. Box 2444, Beijing 100081, China (telephone number, 86-1-831-2669; fax, 86-1-831-2653).

—H. Yuan Tien

POPULATION UPDATE

Estimated United States Population:

As of August 1, 1990	251,641,000
As of August 1, 1989	249,003,000

The above estimates, the latest available, include armed forces overseas and are from U.S. Bureau of the Census, *Current Population Reports,* Series P-25, No. 1065. The estimates do not yet incorporate the preliminary results of the 1990 Census.

Estimated World Population:

As of January 1991	5,368,000,000
Annual growth	93,000,000

Extrapolation from the mid-1990 population on PRB's *1990 World Population Data Sheet.*

Latest Provisional Statistics for the U.S.: July 1990

	12 months ending with July					
	Number		Rate			
Item	1990	1989	1990	1989	1988	1987
Live births	4,124,000	3,957,000	16.5	16.1	15.8	15.6
Deaths	2,158,000	2,149,000	8.6	8.7	8.9	8.7
Natural increase	1,966,000	1,808,000	7.9	7.4	6.9	6.9
Marriages	2,414,000	2,398,000	9.7	9.7	9.7	10.1
Divorces	1,181,000	1,183,000	4.7	4.7	4.7	4.8
Infant deaths	38,400	38,900	9.3	9.3	10.0	10.1
Population base (in millions)	. . .	. . .	249.6	247.3	244.7	242.2

Note. Rates are given per 1,000 population, except for infant deaths, which are given per 1,000 live births.

Source. Monthly Vital Statistics Report (Vol. 39, No. 7) from the National Center for Health Statistics.

Ethiopia

Continued from page 5

Rural Patterns Dominate

In rural areas, the estimated total fertility rate (TFR) rose from 5.6 to 7.7 children per woman between the 1965-1970 and the 1980-1981 periods. Urban areas like Addis Ababa, however, had comparatively low fertility in the 1960s, and declined from five children per women in the 1970s to four children in the early 1980s.

Ethiopia's rise in fertility reflects a phenomenon often observed in the early stage of modernization. Improvements in food and health delivery systems can reduce infertility and subfecundity previously caused by disease and malnutrition. Modernization also tends to reduce breastfeeding, which is thought to inhibit conception.

The lower fertility of Addis Ababa, the author suggests, was an effect of urbanization and education, which raised the age at marriage, increased marital instability, and led to fewer women being married.

Urban dwellers, however, make up only 11 percent of Ethiopia's total population. Furthermore, the 1980-1981 Demographic Survey showed that only 7.4 percent of women aged 10 years and older were literate. The fertility pattern noted for rural people, then, seems likely to prevail for the immediate future.

Even with its high fertility for the population as a whole, however, Ethiopia has a relatively slow natural increase because of its high mortality. Ethiopia has one of the lowest life expectancies at birth and highest infant mortality rates in the world.

–M.Y.

References

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Brass, W. 1975. *Methods for Estimating Fertility and Mortality from Limited and Defective Data,* Laboratories for Population Statistics, University of North Carolina, Chapel Hill.

Tsefaghiorghis, Habtemariam. 1990. *Fertility Levels and Trends in Ethiopia.* Research Note of the Department of Demography, Research School of Social Sciences, Australian National University, Canberra, ACT, Australia.

TAKE A NUMBER

An Eye on Eire: Whither the birth rate in traditional, heavily Catholic Ireland? The Irish birth rate has been falling steadily, and 1989 was no exception. From 21.8 births per 1,000 population in 1980 to 14.7 in 1989, fertility in Ireland has shown a remarkable decline. In fact, the Irish total fertility rate, estimated at 2.08 lifetime children per woman is even a bit below "replacement" level. Now, the Irish have a woman president—and not just any woman, but a socialist feminist who has been outspoken on the subject of liberalizing Ireland's abortion, contraception, and divorce laws. Currently abortion and divorce are illegal, and contraception became legal only a few years ago. While the office of president is largely ceremonial in Ireland, Mary Robinson's new position may well prove to be an influential platform. Time will tell. After all, the world's lowest fertility is in Italy, for heaven's sake.

U.S. Birth Rate Waffles: While we should never place too much emphasis on monthly data, interest in the rising U.S. birth rate is so widespread that we can't help watching it very closely. Monthly births in 1990 were higher than the corresponding month in 1989—until July. July 1990 births (362,000) were a bit below July 1989 (372,000)—see "Population Update," page 9. Birth-rate watchers are, of course, speculating on the likelihood that U.S. fertility will climb back to the "replacement level," a total fertility rate of 2.1 lifetime births per woman. (At replacement level fertility, couples just replace themselves in a population, which leads eventually to zero population growth.) The current crude birth rate of 16.5 births per 1,000 population suggests that it is getting very close to that level.

–C.H.

ADDENDA

Populandia Patter

Populandia, *Population Today*'s much-discussed mythical mini-continent in the Pacific Ocean, crossed the 1 billion mark last year. Designated as the repository of all the world's natural increase (births minus deaths) since January 1, 1978. Populandia's current population (as of January 1, 1991) is 1,072,474,712.

Just six years ago, Populandia passed the half-billion mark. The number of children added to Populandia has been increasing over time. The numbers of immigrants to Populandia will continue to increase for some time as the world population increases, even though the rate of natural increase in the world has been going down and will continue to decline.

Now, each day, more than 256,000 children swell the population of the mythical island. Populandia has as many people now as the entire world at the turn of the 19th century.

The oldest Populandians are age 13, just reaching their childbearing years. Populandia, whose purpose is to relieve population crowding, is itself not only growing congested, but also will soon have natural increase of its own.

–N.R.

CURRENT READINGS

PRB welcomes materials on population topics for possible inclusion in Current Readings. Publishers may address review copies to Book Review Editor, POPULATION TODAY, Population Reference Bureau, 1875 Connecticut Ave., N.W., Suite 520, Washington, D.C. 20009-5728.

ENVIRONMENT DATA REPORT 1989/90, by United Nations Environment Programme, and prepared by the GEMS Monitoring and Assessment Research Centre in cooperation with the World Resources Institute and the U.K. Department of Environment. 2nd ed. Oxford: Basil Blackwell Ltd., 1990. 547 pages, $44.95 paper. ISBN: 0-631-16987-3.

This book is a report of the Global Environmental Monitoring System (or GEMS) Project of the United Nations Environment Programme. It is published biennially and provides detailed and annotated information for use in environmental assessments at the country and international levels.

Although it mainly presents tables and figures of environmental information, the report also includes some analyses of interactions between human activities and the resource base. The analyses summarize global trends (both over time and for geographical areas), as well as regional patterns of resource use. One chapter covers population and settlements.

Partly reflecting the nature of the publication, the book's analyses are less systematic than might be wished. For example, the chapter on population does not link rapid population growth and uneven distribution of population to differential levels of resource availability and pollution (which are discussed in other chapters). Future reports could probably benefit from an organizing framework that will make "policy sense" out of the volumes of data provided.

Major topics include pollution, climate change, energy consumption, transport, wastes, and natural resources. The detailed discussion of natural disasters is very useful, as it compiles information from various sources and provides sufficiently reliable estimates of the human costs associated with disasters.

The last chapter discusses various institutional arrangements for international programs, such as environmental organizations, enabling legislation, and various types of information sources worldwide. One interesting table describes otherwise unavailable information from satellite remote sensing and the Environmental Data Compendia data base.

Whenever possible, the report gives statistical data for each country. Most of the tables are at least classified by region. The appendices contain various lists of tables, topics, and other information from earlier reports.

—Chona Cruz

THE POLITICS OF RICH AND POOR: Wealth and the American Electorate in the Reagan Aftermath, by Kevin Phillips. New York: Random House., 1990. 262 pages. $19.95 hardback. ISBN: 0-394-55954-1.

Political analyst Kevin Phillips surprised many people with this book. The former Republican strategist's first book, *The Emerging Republican Majority,* in 1967, delineated the strategies that would consolidate conservative political power in the Nixon and Reagan eras. Now, Phillips takes a stiletto to the Reagan/Bush Era.

Phillips compares the present moment to earlier conservative "heydays"—such as the 1920s and the Gilded Age at the end of the last century. In those times, like our own, wealth concentrated dramatically at the uppermost end of the income scale, a process helped along by governmental policies of deregulation, high interest rates, and low taxes. Phillips finds, however, that these political eras ended abruptly, in a series of "watershed elections." Voters chose presidents who represented liberal social ideologies, such as Franklin D. Roosevelt (1932), Abraham Lincoln (1860), Andrew Jackson (1828), and Thomas Jefferson (1800).

The times have come round for another such reversal, Phillips admonishes, but he engages in little crystal-ball gazing. Instead, he focuses on what happened in the 1980s. He examines data from mostly government sources to analyze U.S. "plutographics" (a tongue-in-cheek buzzword for the demographics of wealth) and the sharpening contrasts between wealthy versus other income classes. For example, in the United States between the early and late 1980s, the number of millionaires rose from 600,000 to 1.5 million; the number of decamillionaries ($10 million-plus) rose from 38,855 to 100,000; and the number of billionaires from 13 to 51 (1988 count).

The book is a lively investigation of the relationships between social class and politics in the United States.

—Susan Kalish

Books Received

ENVIRONMENTAL SCIENCE: The Study of Interrelationships, by E. Enger, J.R. Kormelink, B.F. Smith, and R.J. Smith. Dubuke, Iowa: Wm. C. Brown Company, 1983.

METHODS AND MODELS IN DEMOGRAPHY, by Colin Newell. New York: The Guilford Press, 1988.

OPENING AND CLOSING THE DOORS: Evaluating Immigration Reform and Control, by Frank D. Bean, Georges Vernez, and Charles B. Keely. Lanham, Md.: University Press of America, 1989.

SOCIAL GEOGRAPHY: An Introduction to Contemporary Issues, by John Cater and Trevor Jones. London: Edward Arnold, a Division of Hodder & Stoughton, 1989.

SPOTLIGHT

UNITED STATES

(Part 2 of 2)

Population (1990 est.): 251,641,000
Land Area: 3,539,289 sq. mi.
Population Density: 71 persons/sq. mi.
Births per 1,000 Population: 16.6
Deaths per 1,000 Population: 8.7
Rate of Natural Increase: 0.79%
Total Fertility Rate: 1.99
Infant Mortality Rate: 9.4 per 1,000 live births
Life Expectancy at Birth: 74.9
GNP per Capita (1988): $19,780

by Kelvin Pollard

Former CBS commentator Eric Severaid once noted, "Anything you can say about America is likely to be true." Severaid was no doubt referring to the diversity found in the United States. At once, it is white-collar and blue-collar. Urban, suburban, and rural. Multiethnic, but with areas of relative homogeneity. Frostbelt and Sunbelt. Areas of great wealth and pockets of extreme poverty. In many ways, the United States is one of the most diverse countries in the industrialized world.

The United States is a racial/ethnic mosaic. Three-fourths of America's 251.6 million persons are of European descent. However, higher fertility rates among non-European groups and immigration from Asia and Latin America are making the population increasingly multicultural. For instance, blacks and other nonwhite groups have fertility rates above replacement level (the total fertility rate in 1988 was 2.5 lifetime births per woman), while white fertility was 1.8—below replacement level. Moreover, African-Americans, Hispanics, Asian-Americans, and Native Americans grew 1.5 to six times faster than the white population over the last decade.

About one American in five changes residence each year. Some, however, are more mobile than others. Young adults move the most—nearly one in three people aged 25 to 29 changed residence between 1986-1987. By contrast, only 1 in 20 people age 65 or older migrated in that time, despite the popular image that most elderly retirees relocate, particularly to the Sunbelt.

Over the past 20 years, the northern states have lost population while the South and West gained. Southern and western states now contain 55 percent of the population, compared to 48 percent in 1970. Migration patterns also vary among urban, rural, and suburban areas. Between 1986 and 1987, approximately 1.97 million more people moved into suburbs than moved out. Central cities and rural areas, in contrast, experienced net outmigration. The new growth areas for employment and residential centers are now on the outer fringes of major metropolitan areas.

Even the much-discussed "graying of America" means different things for different population groups. A record 12 percent of Americans are age 65 and over, and the percentage of elderly in the population has increased for all racial/ethnic groups. That percentage, though, is greater for whites (13.3 percent) than for blacks (8.3 percent) and Hispanics (5.2 percent). At age 50, whites can expect to live 28.9 more years—3.3 years more than for their black counterparts (1987 figures).

Population groups have benefited differently from America's wealth, which, on a per capita basis, is the sixth largest in the world. In 1989, 13 percent of Americans lived below the official poverty level; but 20 percent of children were poor. Moreover, the percentage of blacks and Hispanics in poverty was more than double the national rate. In addition, recent trends suggest a growing gap between rich and other income classes. From 1980-1989, for example, the share of aggregate household income earned by the richest 20 percent of households increased from 44 to 47 percent.

The diverse elements making up the United States will strongly influence the nation's future. The country's educational system and labor force, for example, will soon reflect the increasing racial/ethnic diversity. The aging of the population will test the Social Security and health care systems. How America's policymakers deal with these and other issues will affect the quality of life well into the 21st century.

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